

THE CLAIMS ARE:

1. A method of molding comprising forming a decorative substrate into a three-dimensional shape, placing said substrate into a mold, injection molding a resin into the mold cavity space behind the formed substrate, said decorative substrate comprising a substantially transparent cycloaliphatic polyester resin.

2. A method of molding according to claims 2 where said shape and said injection molded resin form a single molded part.

3. A method of claim 2 where the cycloaliphatic polyester consists essentially of cycloaliphatic diacid and cycloaliphatic diol units.

4. A method of claim 2 where said substrate consists essentially of cycloaliphatic polyester which consists essentially of polycyclohexane dimethanol cyclohexane dicarboxylate (PCCD).

5. A method of claim 2 wherein the decorative substrate optionally comprises from about 0 to about 80 percent by weight of a polycarbonate resin.

6. A method of claim 2 wherein the decorative substrate optionally comprises from about 0 to about 40 percent by weight of a polycarbonate resin.

7. A method of claim 2 wherein said polycarbonate resin comprises primarily of the following structural units: bisphenol A, spiro biindane bisphenol, an aryl substituted bisphenol, a cycloaliphatic bisphenol or mixtures thereof.

8. A method of claim 7 wherein said decorative comprises a sheet or a film having a thickness of less than about 12mm.

9. A method of claim 7 wherein said decorative substrate said decorative comprises a sheet or a film having a thickness from about 100 to about 1000 micron.

10. A method of claim 7 where the polycarbonate is BPA-PC and the cycloaliphatic polyester is PCCD.

11. A method of claim 7 where the blend has % transmittance of greater than or equal to 75%.

5 12. A method of claim 7 where the blend has a glass transition temperature of from about 90 to 150°C.

13. A method of claim 7 wherein the decorative substrate comprises more than about 70 percent by weight cycloaliphatic polyester.

10 14. A method of claim 3 wherein said decorative substrate comprises less than up to 20% by weight of and impact modifier.

15 15. A method of claim 14 wherein said impact modifier is substantially transparent.

16. A method of claim 15 comprising less than about 15 percent transparent impact modifier.

15 17. A method of claim 16 wherein said transparent impact modifier has a refractive index (RI) between 1.51 and 1.58.

18. A method of claim 17 wherein said impact modifier comprises a acrylonitrile-butadiene-styrene.

20 19. A method of molding according to claim 18 wherein said molded article comprises a decorative film or substrate and an adjacent injection molded polymeric base, and said method includes the steps of:

a) providing said decorative substrate comprising a cycloaliphatic polyester resin having one or more colors on a surface;

25 b) trimming the decorated substrate or forming and trimming the decorated substrate into a three-dimensional shape;

c) fitting the decorated substrate into a mold having a surface which matches the three-dimensional shape of the substrate; and

30 d) injecting a base resin into the mold cavity behind the printed substrate to produce a one-piece, permanently bonded three-dimensional product.

20. A method of forming a decorative article comprising forming a base adjacent a substrate having a decorative area and transferring a portion of said decorative area to said base, said substrate comprises a substantially transparent cycloaliphatic polyester resin.

5 21. A method of forming a decorative article according to claim 20 wherein said base is injected against said substrate.

22. A method of forming a decorative article according to claim 21 wherein said substrate is removed from said base.

10 23. A method of forming a decorative article according to claim 22 wherein said substrate includes a decorative surface and at least a portion of said decorative surface is transferred to said base.

24. A method of forming a decorative article according to claim 23 wherein said transfer of said decorative surface is during said forming.

15 25. A method of forming a decorative article according to claim 24 wherein said substrate comprises a cycloaliphatic polyester resin.

26. A method of forming a decorative article according to claim 25 wherein the cycloaliphatic polyester is comprised of cycloaliphatic diacid and cycloaliphatic diol units.

20 27. A method of forming a decorative article according to claim 26 wherein the cycloaliphatic polyester is polycyclohexane dimethanol cyclohexane dicarboxylate (PCCD).

28. A method of forming a decorative article according to claim 26 wherein the injection molded polymeric base comprises a polycarbonate resin.